CLAIMS

1. A plasma display panel (hereafter referred to as a PDP) manufacturing method, comprising the following steps:

(a) a front plate and a back plate, on at least one of which discharge electrodes have been arranged and on at least one of whose inner surfaces a phosphor layer has been formed, are sealed together so that an inner space is formed between the two plates, and

(b) an aging process performed by applying a required discharge voltage to the discharge electrodes while a discharge gas is present in the inner space,

wherein the aging process includes an evacuating process, in which the discharge gas in the inner space is evacuated.

2. The PDP manufacturing method of Claim 1, wherein the aging process further includes an introducing process, in which discharge gas is newly introduced into the inner space from the outside;

the introducing process introduces the discharge gas via a first air vent formed in one of the front plate and the back plate;

the evacuating process evacuates the introduced discharge gas through a second air vent formed in one of the front plate and the back plate; and

performing the introducing process together with the

evacuating process enables a discharge to be produced by applying the required discharge voltage to the discharge electrodes while continuously circulating discharge gas through the inner space.

3. The PDP manufacturing method of Claim 1, wherein the aging process further includes an introducing process in which discharge gas is newly introduced into the inner space from the outside;

the introducing process introduces the discharge gas via a first air vent formed in one of the front plate and the back plate;

the evacuating process evacuates the introduced discharge gas through a second air vent formed in one of the front plate and the back plate; and

performing the introducing process together with the evacuating process enables a discharge to be produced by applying the required discharge voltage to the discharge electrodes while intermittently circulating discharge gas through the inner space.

4. The PDP manufacturing method of Claim 1, wherein the aging process further includes an introducing process in which discharge gas is newly introduced into the inner space from the outside;

the introducing process introduces the discharge gas via a first air vent formed in one of the front plate and the

back plate;

the evacuating process evacuates the introduced discharge gas through a second air vent formed in one of the front plate and the back plate; and

a plurality of discharges are performed one by one by applying the required discharge voltage to the discharge electrodes, and discharge gas is circulated through the inner space by performing the introducing process together with the evacuating process between discharges.

5. The PDP manufacturing method of one of Claims 2 to 4, wherein the discharge gas introduced into the inner space is a dry gas.

6. The PDP manufacturing method of Claim 5, wherein steam contained in the dry gas has a partial pressure of 15 torr or less.

7. The PDP manufacturing method of one of Claims 2 to 4, wherein the discharge gas introduced into the inner space is an inert gas.

8. The PDP manufacturing method of Claim 7, wherein the inert gas includes at least one of helium, neon, argon and xenon.

9. The PDP manufacturing method of one of Claims 2 to 4,

wherein the PDP subjected to the aging process has the following structure:

a plurality of discharge spaces are formed by arranging a plurality of partitions to divide up the inner space between the front plate and the back plate;

a sealing glass layer for sealing the front plate to the back plate is included between the perimeters of the front plate and the back plate;

a first space connected to the discharge spaces formed by the plurality of partitions is formed between first ends of the plurality of partitions and the sealing glass layer,

a second space connected to the discharge spaces is formed between second ends of the plurality of partitions and the sealing glass layer,

the first air vent is formed to connect with the first space, and

the second air vent is formed to connect with the second space,

and wherein the above structure is subject to an aging process in which the discharge gas is circulated through the discharge space by performing the introducing process by introducing the discharge gas into the first space via the first air vent, and the evacuating process by evacuating the discharge gas from the second space via the second air vent.

10. The PDP of Claim 9, further including a structure in

which a plurality of gas passages leads from the first space to the second space, wherein discharge gas can flow more freely into gas passages being used as discharge spaces than into other gas passages.

11. The PDP of Claim 10, in which a minimum distance between partition ends of the plurality of partitions, excluding at least a partition furthest from the first air vent, and the sealing glass layer bordering the first space is more than a minimum distance between the sealing glass layer parallel to the partitions and an adjacent partition.

12. The PDP of Claim 10, further including a structure in which one part of each of the outermost partitions among the plurality of partitions is connected with one part of the sealing glass layer to prevent discharge gas from flowing into space between the outermost partitions and the sealing glass layer.

13. The PDP of Claim 11 or Claim 12, further including a structure in which the first air vent is formed in the vicinity of one of the outermost partitions, and the second air vent is formed in the vicinity of the other outermost partition, on the opposite side to the first air vent.

14. The PDP manufacturing method of one of Claims 2 to 4, wherein the PDP subjected to the aging process has the

following structure:

a plurality of discharge spaces are formed by arranging a plurality of partitions to divide up the inner space between the front plate and the back plate;

a sealing glass layer for sealing the front plate to the back plate is included between the perimeters of the front plate and the back plate;

a barrier is included between the front plate and the back plate, around the inside of the sealing glass layer;

a first space connected to the discharge spaces formed by the plurality of partitions is formed between first ends of the plurality of partitions and the barrier;

a second space connected to the discharge spaces is formed between second ends of the plurality of partitions and the barrier;

the first air vent is formed to connect with the first space; and

the second air vent is formed to connect with the second space,

wherein the above structure is subject to an aging process in which the discharge gas is circulated through the discharge space by performing the introducing process by introducing the discharge gas into the first space via the first air vent, and the evacuating process by evacuating the discharge gas from the second space via the second air vent.

15. The PDP of Claim 14, further including a structure

which a plurality of gas passages leads from the first space to the second space, wherein discharge gas can flow more freely into gas passages being used as discharge spaces than into other gas passages.

16. The PDP of Claim 15, further including a structure in which a minimum distance between partition ends of the plurality of partitions, excluding at least a partition furthest from the first air vent, and the barrier bordering the first space is more than a minimum distance between the barrier parallel to the partitions and an adjacent partition.

17. The PDP of Claim 15, further including a structure in which one part of each of the outermost partitions among the plurality of partitions and one part of the barrier are connected to prevent discharge gas from flowing into space between the outermost partitions and the barrier.

18. The PDP of Claim 16 or Claim 17, further including a structure in which the first air vent is formed in the vicinity of one of the outermost partitions, and the second air vent is formed in the vicinity of the other outermost partition, on the opposite side to the first air vent.

19. A PDP manufacturing method, comprising the following steps:

(a) a front plate and a back plate, on at least one of

which discharge electrodes have been arranged and on at least one of whose inner surfaces a phosphor layer has been formed, are sealed together so that an inner space is formed between the two plates, and

(b) an aging process is performed by applying a required discharge voltage to the discharge electrodes while a discharge gas is present in the inner space,

wherein, after the aging process is completed, a heating process for heating phosphors that form the phosphor layer is performed.

20. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the whole of both plates in an oven to a temperature of 300℃ or more.

21. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the phosphors to a temperature of 300℃ or more by shining a laser beam on to the part of the plates on which the phosphors are positioned.

22. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the phosphors to a temperature of 300℃ or more by circulating a heating medium around the inner space.

23. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the whole of both plates in an oven to a temperature of 370℃ or more.

24. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the phosphors to a temperature of 370℃ or more by shining a laser beam on to the part of the plates on which the phosphors are positioned.

25. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the phosphors to a temperature of 370℃ or more by circulating a heating medium around the inner space.

26. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the whole of both plates in an oven to a temperature of 400℃ or more.

27. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the phosphors to a temperature of 400℃ or more by shining a laser beam on to the part of the plates on which the phosphors are positioned.

28. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the phosphors to a temperature of 500℃ or more by shining a laser beam on to the part of the plates on which the phosphors are positioned.

29. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the phosphors to a temperature of 400℃ or more by circulating a heating medium around the inner space.

30. The PDP manufacturing method of Claim 19, wherein the heating process following the aging process is performed by heating the phosphors to a temperature of 500℃ or more by circulating a heating medium around the inner space.

31. The manufacturing process for a PDP of one of Claims 20, 21, 23, 24, 26, 27, and 28, wherein the heating process following the aging process is performed while the gas is evacuated from the inner space.

32. The manufacturing process for a PDP of one of Claims 20, 21, 23, 24, 26, 27, and 28, wherein the phosphors are heated, after gas is evacuated from the inner space and the dry gas introduced following the aging process.

33. The manufacturing process for a PDP of one of Claims

20 to 30, wherein the heating process following the aging process is performed while the dry gas is introduced through the first air vent formed in one of the front plate and the back plate and the introduced dry gas evacuated through the second air vent formed in one of the front plate and the back plate.

34. The PDP manufacturing method of Claim 33, wherein the PDP subjected to the heating process has the following structure:

a plurality of discharge spaces are formed by arranging a plurality of partitions to divide up the inner space between the front plate and the back plate;

a sealing glass layer for sealing the front plate to the back plate is included between the perimeters of the front plate and the back plate;

a first space connected to the discharge spaces formed by the plurality of partitions is formed between first ends of the plurality of partitions and the sealing glass layer,

a second space connected to the discharge spaces is formed between second end of the plurality of partitions and the sealing glass layer,

the first air vent is formed to connect with the first space, and

the second air vent is formed to connect with the second space,

wherein the above structure is subject to a heating

process in which the dry gas is circulated through the discharge space by performing the introducing process by introducing the dry gas into the first space via the first air vent and the evacuating process by evacuating the dry gas from the second space via the second air vent.

35. The PDP of Claim 34, further including a structure which a plurality of gas passages leads from the first space to the second space, wherein discharge gas can flow more freely into gas passages being used as discharge spaces than into other gas passages.

36. The PDP of Claim 35, further including a structure in which a minimum distance between partition ends of the plurality of partitions, excluding at least a partition furthest from the first air vent, and the sealing glass layer bordering the first space is more than a minimum distance between the sealing glass layer parallel to the partitions and an adjacent partition.

37. The PDP of Claim 35, further including a structure in which one part of each of the outermost partitions among the plurality of partitions and one part of the sealing glass layer are connected to prevent dry gas from flowing into space between the outermost partitions and the sealing glass layer.

38. The PDP of Claim 36 or Claim 37, further including a structure in which the first air vent is formed in the vicinity of one of the outermost partitions, and the second air vent is formed in the vicinity of the other outermost partition, on the opposite side to the first air vent.

39. The PDP manufacturing method of Claim 33, wherein the PDP subjected to the heating process has the following structure:

a plurality of discharge spaces are formed by arranging a plurality of partitions to divide up the inner space between the front plate and the back plate;

a sealing glass layer for sealing the front plate to the back plate is included between the perimeters of the front plate and the back plate;

a barrier is included between the front plate and the back plate, around the inside of the sealing glass layer;

a first space connected to the discharge spaces formed by the plurality of partitions is formed between first ends of the plurality of partitions and the barrier,

a second space connected to the discharge spaces is formed between second ends of the plurality of partitions and the barrier,

the first air vent is formed to connect with the first space, and

the second air vent is formed to connect with the second space,

wherein the above structure is subject to a heating process in which the dry gas is circulated through the discharge space by performing the introducing process by introducing the dry gas into the first space via the first air vent and the evacuating process by evacuating the dry gas from the second space via the second air vent.

40. The PDP of Claim 39, further including a structure which a plurality of gas passages leads from the first space to the second space, wherein discharge gas can flow more freely into gas passages being used as discharge spaces than into other gas passages.

41. The PDP of Claim 40, further including a structure in which a minimum distance between partition ends of the plurality of partitions, excluding at least a partition furthest from the first air vent, and the barrier bordering the first space is more than a minimum distance between the barrier parallel to the partitions and an adjacent partition.

42. The PDP of Claim 40, further including a structure in which one part of each of the outermost partitions among the plurality of partitions and one part of the barrier are connected to prevent discharge gas from flowing into space between the outermost partitions and the barrier.

43. The PDP of Claim 41 or Claim 42, further including a structure in which:

the first air vent is formed in the vicinity of one of the outermost partitions, and the second air vent is formed in the vicinity of the other outermost partition, on the opposite side to the first air vent.

44. The PDP manufacturing method of Claim 32, wherein the dry gas includes an inert gas.

45. The PDP manufacturing method of Claim 33, wherein the dry gas includes an inert gas.

46. The PDP manufacturing method of Claim 32, wherein the dry gas includes oxygen.

47. The PDP manufacturing method of Claim 33, wherein the dry gas includes oxygen.

48. The PDP manufacturing method of Claim 22 or Claim 25 wherein the evacuating process for evacuating the introduced dry gas from the inner space between the plates heated by the heating process following the aging process is performed while the plates are still hot.

49. The PDP manufacturing method of Claim 31, wherein the evacuating process for evacuating the introduced dry gas

from the inner space of the plates heated by the heating process is performed following the aging process while the plates are still hot.

50. The PDP manufacturing method of Claim 32, wherein the evacuating process for evacuating the introduced dry gas from the inner space of the plates heated by the heating process following the aging process is performed while the plates are still hot.

51. The PDP manufacturing method of Claim 33, wherein the evacuating process for evacuating the introduced dry gas from the inner space of the plates heated by the heating process following the aging process is performed while the plates are still hot.

52. An aging process performed on a PDP in which a front plate and a back plate, on at least one of which discharge electrodes have been arranged and on at least one of whose inner surfaces a phosphor layer has been formed, are sealed together so that an inner space is formed between the two plates,

wherein the aging process includes a discharge process for creating a discharge in the inner space by applying a required discharge voltage to the electrodes while a discharge gas is in the inner space, and an evacuating process for evacuating the discharge gas from the inner

space.

53. The aging process of Claim 52, further including an introducing process in which discharge gas is newly introduced into the inner space from the outside, wherein:

the introducing process introduces the discharge gas via a first air vent formed in one of the front plate and the back plate;

the evacuating process evacuates the introduced discharge gas through a second air vent formed in the one of the front plate and the back plate; and

performing the introducing process together with the evacuating process enables a discharge to be created by applying the required discharge voltage to the discharge electrodes while circulating discharge gas continuously through the inner space.

54. The aging process of Claim 52, further including an introducing process in which discharge gas is newly introduced into the inner space from the outside, wherein:

the introducing process introduces the discharge gas via a first air vent formed in the one of the front plate and the back plate;

the evacuating process evacuates the introduced discharge gas through a second air vent formed in one of the front plate and the back plate; and

performing the introducing process together with the

evacuating process enables a discharge to be created by applying the required discharge voltage to the discharge electrodes while circulating discharge gas intermittently through the inner space.

55. The aging process of Claim 52, further including an introducing process in which discharge gas is newly introduced into the inner space from the outside;

the introducing process introduces the discharge gas via a first air vent formed in one of the front plate and the back plate;

the evacuating process evacuates the introduced discharge gas through a second air vent formed in one of the front plate and the back plate; and

a plurality of discharges are performed one by one by applying the required discharge voltage to the discharge electrodes, and discharge gas is circulated through the inner space by performing the introducing process together with the evacuating process between discharges.

56. The aging process of one of Claims 53 to 55, wherein the discharge gas introduced into the inner space is a dry gas.

57. The aging process of Claim 56, wherein steam contained in the dry gas has a partial pressure of 15 torr or less.

58. The aging process of one of Claims 53 to 55, wherein the discharge gas introduced into the inner space is an inert gas.

59. The aging process of Claim 58, wherein the inert gas includes at least one of helium, neon, argon and xenon.

60. The aging process of one of Claims 53 to 55, wherein the PDP subjected to the aging process has the following structure:

a plurality of discharge spaces by arranging a plurality of partitions to divide up the inner space between the front plate and the back plate;

a sealing glass layer for sealing the front plate to the back plate is included between the perimeters of the front plate and the back plate;

a first space connected to the discharge spaces formed by the plurality of partitions is formed between first ends of the plurality of partitions and the sealing glass layer,

a second space connected to the discharge spaces is formed between second ends of the plurality of partitions and the sealing glass layer,

the first air vent is formed to connect with the first space, and

the second air vent is formed to connect with the second space,

wherein the discharge gas is circulated through the discharge space of the above structure by performing the introducing process by introducing the discharge gas into the first space via the first air vent, and the evacuating process by evacuating the discharge gas from the second space via the second air vent.

61. The PDP of Claim 60, further including a structure which a plurality of gas passages leads from the first space to the second space, wherein discharge gas can flow more freely into gas passages being used as discharge spaces than into other gas passages.

62. The PDP of Claim 61, further including a structure in which a minimum distance between partition ends of the plurality of partitions, excluding at least a partition furthest from the first air vent, and the sealing glass layer bordering the first space is more than a minimum distance between the sealing glass layer parallel to the partitions and an adjacent partition.

63. The PDP of Claim 61, further including a structure in which one part of each of the outermost partitions among the plurality of partitions and one part of the sealing glass layer are connected to prevent discharge gas from flowing into space between the outermost partitions and the sealing glass layer.

64. The PDP of Claim 62 or Claim 63, further including a structure in which the first air vent is formed in the vicinity of one of the outermost partitions, and the second air vent is formed in the vicinity of the other outermost partition, on the opposite side to the first air vent.

65. The aging process of one of Claims 53 to 55, wherein the PDP subjected to the aging process has the following structure:

a plurality of discharge spaces are formed by arranging a plurality of partitions to divide up the inner space between the front plate and the back plate;

a sealing glass layer for sealing the front plate to the back plate is included between the perimeters of the front plate and the back plate;

a barrier is included between the front and back plates, around the inside of the sealing glass layer;

a first space connected to the discharge spaces formed by the plurality of partitions is formed between first ends of the plurality of partitions and the barrier,

a second space connected to the discharge spaces is formed between second ends of the plurality of partitions and the barrier,

the first air vent is formed to connect with the first space, and

the second air vent is formed to connect with the second

space,

wherein, the discharge gas is circulated through the discharge space of the above structure by performing the introducing process for introducing the discharge gas into the first space via the first air vent, and the evacuating process for evacuating the discharge gas from the second space via the second air vent.

66. The PDP of Claim 65, further including a structure which a plurality of gas passages leads from the first space to the second space, wherein discharge gas can flow more freely into gas passages being used as discharge spaces than into other gas passages.

67. The PDP of Claim 66, further including a structure in which a minimum distance between partition ends of the plurality of partitions, excluding at least a partition furthest from the first air vent, and the barrier bordering the first space is more than a minimum distance between the barrier parallel to the partitions and an adjacent partition.

68. The PDP of Claim 66, further including a structure in which one part of one of the outermost partitions among the plurality of partitions and one part of the barrier are connected to prevent discharge gas from flowing into space between the outermost partitions and the barrier.

69. The PDP of Claim 67 or Claim 68, further including a structure in which the first air vent is formed in the vicinity of one of the outermost partitions, and the second air vent is formed in the vicinity of the other outermost partition, on the opposite side to the first air vent.

70. An aging process performed on a PDP in which a front plate and a back plate, on at least one of which discharge electrodes have been arranged and on at least one of whose inner surfaces a phosphor layer has been formed, are sealed together so that the an inner space is formed between the two plates, the aging process including:

a discharge process for creating a discharge by applying a required discharge voltage to the discharge electrodes while a discharge gas is present in the inner space, and

a heating process, performed following the discharge process, for heating phosphors that form the phosphor layer.

71. The aging process of Claim 70, wherein the heating process is performed by heating the whole of both plates in an oven to a temperature of 300℃ or more.

72. The aging process of Claim 70, wherein the heating process is performed by heating the phosphors to a temperature of 300℃ or more by shining a laser beam on to the part of the plates on which the phosphors are positioned.

73. The aging process of Claim 70, wherein the heating process is performed by heating the phosphors to a temperature of 300℃ or more by circulating a heating medium around the inner space.

74. The aging process of Claim 70, wherein the heating process is performed by heating the whole of both plates in an oven to a temperature of 370℃ or more.

75. The aging process of Claim 70, wherein the heating process is performed by heating the phosphors to a temperature of 370℃ or more by shining a laser beam on to the part of the plates on which the phosphors are positioned.

76. The aging process of Claim 70, wherein the heating process is performed by heating the phosphors to a temperature of 370℃ or more by circulating a heating medium around the inner space.

77. The aging process of Claim 70, wherein the heating process is performed by heating the whole of both plates in an oven to a temperature of 400℃ or more.

78. The aging process of Claim 70, wherein the heating process is performed by heating the phosphors to a temperature of 400℃ or more by shining a laser beam on to the part of the plates on which the phosphors are positioned.

79. The aging process of Claim 70, wherein the heating process is performed by heating the phosphors to a temperature of 500℃ or more by shining a laser beam on to the part of the plates on which the phosphors are positioned.

80. The aging process of Claim 70, wherein the heating process is performed by heating the phosphors to a temperature of 400℃ or more by circulating a heating medium around the inner space.

81. The aging process of Claim 70, wherein the heating process is performed by heating the phosphors to a temperature of 500℃ or more by circulating a heating medium around the inner space.

82. The aging process of one of Claims 71, 74, 75, 77, 78 and 79, wherein the heating process is performed while the gas in the inner space is being evacuated.

83. The aging process of one of Claims 71, 72, 74, 75, 77 78, and 79, wherein the phosphors are heated following the discharge process, after the gas in the inner space is evacuated, and dry gas introduced.

84. The aging process of one of Claims 71 to 81, wherein the heating process is performed while the dry gas is

introduced through the first air vent formed in one of the front plate and the back plate and the introduced dry gas evacuated through the second air vent formed in one of the front plate and the back plate.

85. The aging process of Claim 84, wherein the PDP subjected to the heating process has the following structure:

a plurality of discharge spaces are formed by arranging a plurality of partitions to divide up the inner space between the front plate and the back plate;

a sealing glass layer for sealing the front plate to the back plate is included between the perimeters of the front plate and the back plate;

a first space connected to the discharge spaces formed by the plurality of partitions is formed between first ends of the plurality of partitions and the sealing glass layer,

a second space connected to the discharge spaces is formed between second ends of the plurality of partitions and the sealing glass layer,

the first air vent is formed to connect with the first space, and

the second air vent is formed to connect with the second space,

wherein, in the heating process for the above structure, the dry gas is circulated through the discharge space by performing the introducing process by introducing the dry gas into the first space via the first air vent and the

evacuating process by evacuating the dry gas from the second space via the second air vent.

86. The PDP of Claim 85, further including a structure which a plurality of gas passages leads from the first space to the second space, wherein discharge gas can flow more freely into gas passages being used as discharge spaces than into other gas passages.

87. The PDP of Claim 86, further including a structure in which a minimum distance between partition ends of the plurality of partitions, excluding at least a partition furthest from the first air vent, and the sealing glass layer bordering the first space is more than a minimum distance between the sealing glass layer parallel to the partitions and an adjacent partition.

88. The PDP of Claim 86, further including a structure in which one part each of the outermost partitions among the plurality of partitions and one part of the sealing glass layer are connected to prevent dry gas from flowing into the space between the outermost partitions and the sealing glass layer.

89. The PDP of Claim 87 or Claim 88, further including the following structure:

the first air vent is formed in the vicinity of one of

the outermost partitions, and the second air vent is formed in the vicinity of the other outermost partition, on the opposite side to the first air vent.

90. The aging process of Claim 84, wherein the PDP subject to the heating process has the following structure:

a plurality of discharge spaces are formed by arranging a plurality of partitions to divide up the inner space between the front plate and the back plate;

a sealing glass layer for sealing the front plate to the back plate is included between the perimeters of the front plate and the back plate;

a barrier is included between the front and back plates, around the inside of the sealing glass layer;

a first space connected to the discharge spaces formed by the plurality of partitions is formed between first ends of the plurality of partitions and the barrier,

a second space connected to the discharge spaces is formed between second ends of the plurality of partitions and the barrier,

the first air vent is formed to connect with the first space, and

the second air vent is formed to connect with the second space,

wherein, in the heating process for the above structure, the dry gas is circulated through the discharge space by performing the introducing process by introducing the dry gas

into the first space via the first air vent and the evacuating process by evacuating the dry gas from the second space via the second air vent.

91. The PDP of Claim 90, further including a structure which a plurality of gas passages leads from the first space to the second space, wherein discharge gas can flow more freely into gas passages being used as discharge spaces than into other gas passages.

92. The PDP of Claim 91, further including a structure in which a minimum distance between partition ends of the plurality of partitions, excluding at least a partition furthest from the first air vent, and the barrier bordering the first space is more than a minimum distance between the barrier parallel to the partitions and an adjacent partition.

93. The PDP of Claim 91, further including a structure in which one part of each of the outermost partitions among the plurality of partitions and one part of the barrier are connected to prevent discharge gas from flowing into space between the outermost partitions and the barrier.

94. The PDP of Claim 92 or Claim 93, further including a structure in which the first air vent is formed in the vicinity of one of the outermost partitions, and the second air vent is formed in the vicinity of the other outermost

partition, on the opposite side to the first air vent.

95. The aging process of Claim 83, wherein the dry gas includes an inert gas.

96. The aging process of Claim 84, wherein the dry gas includes an inert gas.

97. The aging of Claim 83, wherein the dry gas includes oxygen.

98. The aging process of Claim 84, wherein the dry gas includes oxygen.

99. A PDP manufactured using the manufacturing method of one of Claims 1 to 4.

100. A PDP manufactured using the manufacturing method of one of Claims 19 to 30.

101. The PDP manufactured using the manufacturing method of one of Claims 1 to 4, wherein a color temperature of luminous color produced when all cells are ignited by applying the same power to each cell is 7000K or more.

102. The PDP manufactured using the manufacturing method of one of Claims 1 to 4, wherein a color temperature of light

emitted when a plurality of cells arranged on the phosphor layer are excited by vacuum ultraviolet rays is 7000K or more.

103. The PDP manufactured using the manufacturing method of one of Claims 1 to 4, wherein the peak intensity ratio for the light spectrums of blue light emitted from the blue cells and green light emitted from the green cells is greater than or equal to 0.8 when cells in which blue and green phosphor layers have been arranged are ignited by applying the same power to each cell.

104. The PDP manufactured using the manufacturing method of one of Claims 1 to 4, wherein the peak intensity ratio for the light spectrums of blue light emitted from the blue cells and green light emitted from the green cells is greater than or equal to 0.8 when cells in which blue and green phosphor layers have been arranged are excited by vacuum ultraviolet rays.

105. The PDP manufactured using the manufacturing method of one of Claims 19 to 30, wherein a color temperature of luminous color produced when all cells are ignited by applying the same power to each cell is 7000K or more.

106. The PDP manufactured using the manufacturing method

of one of Claims 19 to 30, wherein a color temperature of light emitted when a plurality of cells arranged on the phosphor layer are excited by vacuum ultraviolet rays is 7000K or more.

107. The PDP manufactured using the manufacturing method of one of Claims 19 to 30, wherein the peak intensity ratio for the light spectrums of blue light emitted from the blue cells and green light emitted from the green cells is greater than or equal to 0.8 when cells in which blue and green phosphor layers have been arranged are ignited by applying the same power to each cell.

108. The PDP manufactured using the manufacturing method of one of Claims 19 to 30, wherein the peak intensity ratio for the light spectrums of blue light emitted from the blue cells and green light emitted from the green cells is greater than or equal to 0.8 when cells in which blue and green phosphor layers have been arranged are excited by vacuum ultraviolet rays.

109. A PDP display apparatus comprising:
the PDP of Claim 99; and
a driving circuit for driving the PDP.

110. A PDP apparatus comprising:
the PDP of Claim 100; and

3 a driving circuit for driving the PDP.